

Rabbit anti-Human MRP5/ABCC5 Polyclonal Antibody | anti-ABCC5 antibody

Anti-MRP5/ABCC5 Antibody

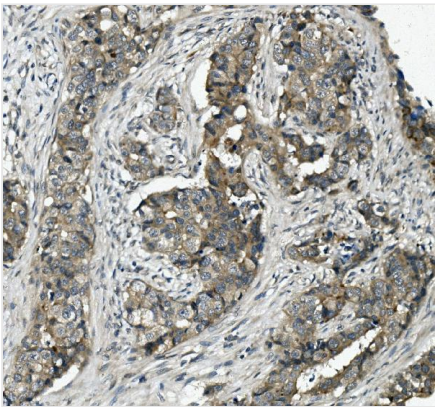
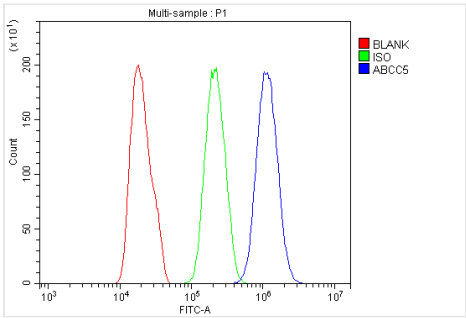
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA125683	Rabbit	Human	ELISA, Flow Cytometry, Functional Assay, Immunohistochemistry

PRODUCT SYNONYMS

MRP5/ABCC5; Polyclonal Antibody; Anti-MRP5/ABCC5 Antibody; ABCC5; MRP5; Multidrug resistance-associated protein 5; ATP-binding cassette sub-family C member 5; Multi-specific organic anion transporter C; MOAT-C; SMRP; pABC11; ATP binding cassette subfamily C member 5; anti-ABCC5 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Rabbit IgG polyclonal antibody for MRP5/ABCC5 detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.01mg NaN3.
Applicable Applications for anti-ABCC5 antibody	ELISA (Direct ELISA), FCM/FACS (Flow Cytometry), IHC (Immunohistochemistry)
Immunogen	E Coli-derived human MRP5/ABCC5 recombinant protein (Position: K647-D1409).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	Recommended Detection Systems
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.

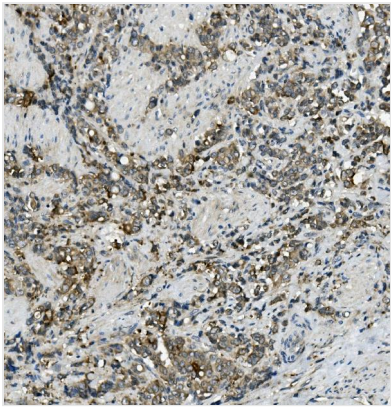


FCM/FACS (Flow Cytometry)

Figure 3. Flow Cytometry analysis of PC-3 cells using anti-MRP5/ABCC5 antibody (AAA125683). Overlay histogram showing PC-3 cells stained with AAA125683 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-MRP5/ABCC5 Antibody (AAA125683, 1μg/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG (5-10μg/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1μg/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

IHC (Immunohistochemistry)

Figure 2. IHC analysis of MRP5/ABCC5 using anti-MRP5/ABCC5 antibody (AAA125683). MRP5/ABCC5 was detected in paraffin-embedded section of human mammary cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2μg/ml rabbit anti-MRP5/ABCC5 Antibody (AAA125683) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



IHC (Immunohistochemistry)

Figure 1. IHC analysis of MRP5/ABCC5 using anti-MRP5/ABCC5 antibody (AAA125683). MRP5/ABCC5 was detected in paraffin-embedded section of human gastric cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2μg/ml rabbit anti-MRP5/ABCC5 Antibody (AAA125683) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

ADDITIONAL INFORMATION

Related Product Information for anti-ABCC5 antibody

Multidrug resistance-associated protein 5 is a protein that in humans is encoded by the ABCC5 gene. The protein encoded by this gene is a member of the superfamily of ATP-binding cassette (ABC) transporters. ABC proteins transport various molecules across extra- and intra-cellular membranes. ABC genes are divided into seven distinct subfamilies (ABC1, MDR/TAP, MRP, ALD, OABP, GCN20, White). This protein is a member of the MRP subfamily which is involved in multi-drug resistance. This protein functions in the cellular export of its substrate, cyclic nucleotides. This export contributes to the degradation of phosphodiesterases and possibly an elimination pathway for cyclic nucleotides. Studies show that this protein provides resistance to thiopurine anticancer drugs, 6-mercaptopurine and thioguanine, and the anti-HIV drug 9-(2-phosphonylmethoxyethyl)adenine. This protein may be involved in resistance to thiopurines in acute lymphoblastic leukemia and antiretroviral nucleoside analogs in HIV-infected patients. Alternative splicing results in multiple transcript variants.

References	1. Allikmets, R., Gerrard, B., Hutchinson, A., Dean, M. Characterization of the human ABC superfamily: isolation and mapping of 21 new genes using the expressed sequence tags database. Hum. Molec. Genet. 5: 1649-1655, 1996. 2. Belinsky, M. G., Bain, L. J., Balsara, B. B., Testa, J. R., Kruh, G. D. Characterization of MOAT-C and MOAT-D, new members of the MRP/cMOAT subfamily of transporter proteins. J. Nat. Cancer Inst. 90: 1735-1741, 1998. 3. Kool, M., de Haas, M., Scheffer, G. L., Scheper, R. J., van Eijk, M. J., Juijn, J. A., Baas, F., Borst, P. Analysis of expression of cMOAT (MRP2), MRP3, MRP4, and MRP5, homologues of the multidrug resistance-associated protein gene (MRP1), in human cancer cell lines. Cancer Res. 57: 3537-3547, 1997.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	30313820
NCBI GeneID	10057
UniProt Accession #	O15440; O14517; Q29ZA9; Q29ZB1; Q86UX3; Q86W30; Q9UN85; Q9UNP5; Q9UQC3; B9EIQ2
Molecular Weight	160,660 Da
NCBI Official Full Name	ATP-binding cassette C5 splicing variant A
NCBI Official Synonym Full Names	ATP-binding cassette, sub-family C (CFTR/MRP), member 5
NCBI Official Symbol	ABCC5
NCBI Official Synonym Symbols	MRP5; SMRP; ABC33; MOATC; MOAT-C; pABC11; EST277145
NCBI Protein Information	multidrug resistance-associated protein 5; ATP-binding cassette sub-family C member 5; multi-specific organic anion transporter C; canalicular multispecific organic anion transporter C
UniProt Protein Name	Multidrug resistance-associated protein 5
UniProt Gene Name	ABCC5
UniProt Synonym Gene Names	MRP5; MOAT-C
UniProt Entry Name	MRP5_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.